

CLAIMS

1. A device (1) for opening-closing a container, particularly a bottle, consisting of a stopper known as the "service cap" (2) arranged at its end and to which there is articulated a shut-off flap (3) equipped with a locking system and which is intended to collaborate in sealed closure with a hole (5) formed at the upper part of the stopper (2) or be made to open by flipping, said shut-off flap (3) comprising controlled-opening means (6), consisting of an energy-storing elastic member (7) inserted between an upper part (2a) of the stopper (2) and a lower part of the shut-off flap (3), characterized in that the energy-storing elastic member (6) consists of two spring leaves (7) that are elastically deformable in one of their free parts, secured to two arms (8), one of the respective ends of which is immobilized in mortises (9) formed on the upper face (2a) of the stopper (2) and each of the other ends of which is equipped with a lateral pivot (10) able to fit in corresponding respective housings (11) formed facing one another on the upper face (2a) of the stopper (2), in a region away from the region of the mortises (9), said arms (8) equipped with pivots (10) being joined together by means for releasing the flap (3) which comprise a frontal pressing region (12) of an operating button (15) secured to the pivots (10) and extending downward at right angles to the arms (8) on one side of the articulation formed by said pivots (10) and extending towards the inside of the stopper (2), in a plane more or less parallel to the arms, on the other side of said articulation, by of a lever (13) able to perform lifting by rotation against an internal part of the free end

of the shut-off flap (3) away from the hinge (14) when pressure is exerted on the pressing region (12) of the operating button (15), until such time as the pip (4) is released from the pouring hole (5).

2. The opening-closing device as claimed in claim 1, characterized in that the shut-off flap (3) comprises internal reliefs (16) constituting pressing ridges produced on an internal region (3a) of said flap (3) at its free end away from the hinge (14), facing that part of the operating button (15) that forms the lever (13), so as to come into contact with the latter on closure.

3. The opening-closing device as claimed in claim 1, characterized in that the shut-off flap (3) comprises, on two parallel side walls and near the hinge (14), two bosses (17) opposite the spring leaves (7), constituting points that compress these leaves on closure.

4. The opening-closing device as claimed in claims 1 to 3, characterized in that the operating button (15), the lever (13), the lateral pivots (10), the arms (8) and the spring leaves (7) are obtained as one piece by molding a plastic, with a geometry such as to allow the single component thus formed to be fitted in hollow corresponding parts belonging to the top of the stopper (2), in the manner of a drawer.

5. The opening-closing device as claimed in claim 1, characterized in that the energy-storing elastic member (20) consists of a block of elastically deformable elastomer inserted into an upper region of the stopper (2A) near the hinge (14A) so as to collaborate, in crushing, when the flap (3A) is in a closed position, with a rib (16A) produced in a

corresponding internal region of the latter.

6. The opening-closing device as claimed in claim 5, characterized in that it comprises means for releasing the shut-off flap which comprise a frontal pressing region (12A) of an operating button (15A), secured to two lateral pivots (10A) able to be articulated in two corresponding housings, said pressing region (12A) being extended at its upper part, beyond the articulation formed by the pivots (10a), towards the inside of the stopper (2A), by a lever (13A) more or less perpendicular to the pressing region (12A) and able to perform lifting by rotation against an internal part of the free end of the shut-off flap (3A) away from the hinge (14A) when pressure is exerted on the pressing region of the operating button (15A), until such time as the pip (4A) is released from the pouring hole (5A).

7. The opening-closing device as claimed in claim 6, characterized in that the operating button (15A) consisting of the pressing region (12A), the pivots (10A) and the lever (13A) is obtained in one piece in a single operation of molding a plastic.

8. The opening-closing device as claimed in one of claims 1 to 7, characterized in that interposed between the frontal pressing region (13, 13A) of the operating button (15, 15A) and its corresponding housing formed in the stopper (2, 2A) are indicators (21) indicating first opening.